NOTE. I was not aware of the utility, until I saw Mr. Evans' rule, of any rule for the extraction of roots above the common one. I have derived his formula, and also the following which will give the value of R to one-half more decimal places than Mr. Evans' rule:

$$R = r \times \frac{(n+1)N + (n-1)r^n}{(n-1)N + (n+1)r^n},$$

where the letters represent the same numbers as in the formula given by Mr. Evans, ANALYST, page 11, Vol. III.

Example. To find the square root of 2. Here $n=2$, $N=2$, and let the approximate trial root be 1.4, then

$$R = 1.4 \times \frac{3\times 2 + (1.4)^2}{2 + 3(1.4)^2} = 1.4 \times \frac{7.96}{7.88} = 1.4 \times \frac{199}{197} = 1.4142133$$

correct to 6 places of decimals. In this formula, if r be too great R will also, and vice versa, and therefore by using two trial roots, one too great and the other too small, the limits, between which the true root is, are obtained.

R. J. Adcock.

[98. Mr. Adcock objects to the published solution of 98. He finds the height due the velocity of the stream (13.2 feet per sec.) to be 2.7+ feet. And because the pressure of a fluid column of that height would produce, in an equal sectional area of the stream, the given velocity, he contends that this pressure, viz., $2.7+ \times 62\frac{1}{2} = 169.2$ is the correct answer.]

BOOK NOTICE.

Elements of Geometry With Exercises for Students, and an Introduction to Modern Geometry, By A. SCHUYLER, LL. D., President of Baldwin University, &c.

This book will interest students on account of its *superior* mechanical execution; but it is especially valuable for the logical accuracy with which the various propositions are announced and demonstrated. The Introduction to Modern Geometry is, for many students, a valuable addition.

ERRATA.

On page 35, erase lines 9, 10 and 11.
" " 41, " third member in lines 9, 10 and 11.
" " 53, lines 18, 20 and 22, for $X(a_1$ or $b_1)$ read $X_1(a_1$ or $b_1)$.
" " 63, last line, for constant angle at N, &c., read constant length of NC.
" " 75, line 5 from bottom for $\frac{ec}{bh}e$, read $\frac{ec}{bh}a$.